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Forest Service, United States Department of Agriculture

ALLEGHENY FOREST EXPERIMENT STATION*

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ROCKY MT. FOREST & RANGE
EXPERIMENT STATION

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Technical Note No. 16.

VOLUME TABLES FOR PLANTATION-GROWN WHITE PINE (Pinus strobus L.)

7,153

The following tables were computed from measurements obtained by the Allegheny Station in cooperation with the Maryland State Department of Forestry and the CCC.

Volumes for plantation-grown white pine were needed by the Allegheny Station in connection with a study of thinnings in a mixed plantation of white pine and yellow poplar on the Loch Raven watershed of the city of Baltimore, Maryland.

Unavailability of volume tables for small-sized trees, and the possibility of a difference in form between plantation-grown and naturally-regenerated trees necessitated the construction of the tables.

WHITE PINE - MARYLAND
(Pinus strobus L.)
Entire stem - Less bark - Cubic feet

D.B.H. o.b. inches	Total height - feet: 20	25	30	35	40	45	50	Basis: No. of trees
	Volume - cubic feet							
2.0	.20	.27	.34	.42				1
2.5	.29	.40	.51	.61				
3.0	.40	.55	.70	.84				3
3.5	.53	.72	.92	1.12				
4.0		0.92	1.16	1.42	1.68			7
4.5		1.14	1.44	1.74	2.04	2.36		
5.0		1.36	1.72	2.06	2.44	2.84		16
5.5		1.62	2.03	2.45	2.94	3.38		
6.0		1.90	2.37	2.90	3.43	3.96	4.5	20
6.5			2.76	3.37	4.00	4.60	5.3	
7.0			3.18	3.86	4.56	5.3	6.0	16
7.5			3.58	4.34	5.15	5.9	6.8	
8.0			4.00	4.85	5.74	6.6	7.5	5
8.5			4.42	5.4	6.4	7.4	8.4	
9.0				5.9	7.0	8.1	9.3	4
9.5				6.6	7.8	9 0	10.2	
10.0				7.3	8.6	9.9	11.1	1
10.5				7.9	9.3	10.8	12.4	
11.0				8.6	10.2	11.8	13.8	0
Basis	1	2	11	19	27	13	0	73

Basis - 73 trees; Aggregate dev. Table 0.15 percent low; Ave. % dev. 5.4
Stump 0.5 ft. high, measured as a cylinder, volume measured by planimeter; table read from alinement chart constructed from multiple logarithmic regression equation by E. F. Meyer in 1937.

*Maintained at Philadelphia, Pennsylvania, in cooperation with the University of Pennsylvania.

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VOLUME TABLE

WHITE PINE - MARYLAND
(Pinus strobus L.)
Merchantable stem - Loss bark - Cubic foot
(To a four inch top i.b.)

D.B.H. o.b. inches	Height - feet						Basis: No. of trees
	25	30	35	40	45	50	
4.5	.59	.61	.64	.68	.72		3
5.0	.99	1.11	1.25	1.38	1.52		13
5.5	1.39	1.60	1.83	2.05	2 29		
6.0	1.79	2.08	2.40	2.72	3.04	3.35	28
6.5		2.54	2.96	3.35	3.72	4.15	
7.0		3.00	3.49	3.97	4.48	4.95	8
7.5		3.47	4.02	4.60	5.20	5.80	
8.0		3.90	4.60	5.30	5.95	6.6	2
8.5		4.38	5.15	5.9	6.6	7.4	
9.0			5.7	6.5	7.4	8.2	6
9.5			6.2	7.1	8.1	9.0	
10.0			6.6	7.7	8.8	9.8	2
10.5			7.2	8.3	9.4	10.5	
11.0			7.7	9.0	10.1	11.2	0
Basis	0	4	18	29	11	0	62

Basis - 62 trees; Aggregate dev. Table 0.72% low; Ave. % dev. 7.1
Stump 0.5 ft. high, measured as a cylinder, volume measured by planimeter; table read from alinement chart constructed from multiple regression equation by E. F. Meyer

E. F. Meyer
Junior Forester

August 6, 1937.